

AMENDMENTS TO THE CLAIMS

1-30. (Cancelled)

31. (Currently amended) A recombinant plasmid expression vector comprising:

a) at least one gene sequence of a mesophilic bacterium coding for a polypeptide having uridine phosphorylase enzyme activity and at least one gene sequence of a mesophilic bacterium coding for a polypeptide having purine nucleoside phosphorylase enzyme activity; and

b) at least one gene sequence coding for tetracycline resistance, and/or kanamycin resistance, or a combination thereof.

32. (Cancelled)

33. (Currently amended) A plasmid vector according to claim 31, wherein at least one gene sequence encoding a polypeptide having uridine phosphorylase enzyme activity, at least one gene sequence of a mesophilic bacterium coding for a polypeptide having purine nucleoside phosphorylase enzyme activity, ~~and the~~ a gene sequence coding for at least one of tetracycline and ~~or~~ kanamycin resistance, and a transcription control sequence, are cloned into the plasmid pUC18.

34. (Previously presented) A plasmid vector according to claim 31, wherein the mesophilic bacterium is *E. coli*.

35. (Currently amended) A plasmid vector according to claim 34, wherein the sequence encoding a polypeptide having uridine phosphorylase enzyme activity is ~~the sequence~~ an *udp* gene.

36. (Currently amended) A plasmid vector according to claim 35, wherein the *udp* gene has the sequence of residues 243 to 1021 of SEQ ID NO:6 ~~is the EMBL sequence having accession number X15689~~.

37. (Currently amended) A plasmid vector according to claim 34, wherein the sequence encoding a polypeptide having purine nucleoside phosphorylase enzyme activity is ~~the sequence~~ a *deoD* gene.

38. (Currently amended) A plasmid vector according to claim 37, wherein the *deoD* gene has the sequence of residues 1037 to 1766 of SEQ ID NO:6 is the EMBL sequence having accession number M60917.

39. (Currently amended) A plasmid vector according to claim 31, wherein the sequence coding for tetracycline resistance is the *Tet* gene of plasmid pBR322.

40. (Currently amended) A plasmid vector according to claim 31, wherein the sequence coding for kanamycin resistance is the *kan* gene of plasmid pET29c.

41. (Previously presented) A plasmid vector according to claim 31, wherein said gene sequence coding for a polypeptide having uridine phosphorylase enzyme activity and said gene sequence coding for a polypeptide having purine nucleoside phosphorylase enzyme activity are fused together so to express a fusion protein wherein the enzymes uridine phosphorylase and purine nucleoside phosphorylase are covalently bonded together.

42. (Currently amended) A plasmid vector according to claim 31, wherein said gene sequence coding for a polypeptide having uridine phosphorylase enzyme activity and said gene sequence coding for a polypeptide having purine nucleoside phosphorylase enzyme activity are fused together so to express a fusion protein wherein the enzymes uridine phosphorylase and purine nucleoside phosphorylase are bonded together by a polypeptide linker of more than one amino acid ~~aminoacidic~~ units.

43. (Currently amended) A plasmid vector selected from those having sequence: SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14 and SEQ ID NO: 15.

44. (Previously presented) Prokaryotic host cells, which contain at least one plasmid vector according to claim 31.







66. (New) A plasmid vector according to claim 63, wherein the gene sequence coding for a polypeptide having uridine phosphorylase enzyme activity and the gene sequence coding for a polypeptide having purine nucleoside phosphorylase enzyme activity are fused together so to express a fusion protein wherein the enzymes uridine phosphorylase and purine nucleoside phosphorylase are bonded together by a polypeptide linker of more than one amino acid.